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(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: cDNA

(vii) IMMEDIATE SOURCE:
(B) CLONE: U-U80

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:

GGCACGAGGG ACAAGCGATG GCAGCAGAAAT TGTCTCCAC GCTGAGCAAG AGCATCTTTG 60
AAGGAGCCGG TGGATCTTAC TCTACTTGGT CAGGTGCCGA TCTCCCCCTT CTTACTGATG 120
CAAAGCTCGG CGGAGGCAAG CTTGTCCTGA AACCACTGGG CTGGCGTTG CCTCACTATT 180
CCGACTCATC GAAAGTCGGC TATGTTCTTG AAGGAAGAGC GGTGGTGGGG CTAACACTCT 240
ATGGAGAGAC CGAGCAGAGG ATACTGCTGC TTGAGAAGGG AGATGTGGTA GCGGTGGTCA 300
TGGGGAGCCT CACGTGGTGG TACAACGAGG AGGAGGACTC GACTTCTCC ATCGCCTTCT 360
TAGGCGATAC CGGACAGCT GTGCGACCGG GCGACATCGC CTACTTCTTC TTGGCAGGAT 420
CCCTAGGAAG TGCTCCATGG CTTTTCGACG GAAATTCCTC ANCAGGGCCT GCGGTTTAAG 480
GGGATGCGGA AGCTGANGAG CTCTTCGGAA GCCAACCTGG TACTCTAATC ATCACACNGC 540
AGCAAAAGCT GCCTGGCCTC AGANCATCCC GAGCTGACAG CNAAGGGATA TCNTAAACGC 600
TGANCGCGTA NCGGCATATA TCAATGTGAA AAGTGGTGGC TGTTCTGCCT CGGTGACCCT 660
TNATNAACTG GCNGCNCTGG GAAGATCAGG TTCTCCGTCN ACCTCCAAAA ATCCANCCTA 720
ACCCCGTGCC TTGCCGGGGT TCTTCNTTGA ATCNNCTGTT CANCTGAAAT TTTTCCCAA 780
GGCCNTGGAA CAATTCT 797

(2) INFORMATION FOR SEQ ID NO: 20:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 742 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: cDNA

(vii) IMMEDIATE SOURCE:
(B) CLONE: U-U90

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:

GGCACGAGAT GACTCTCTCG GCGGTAGCAT CGGATGCCGA TGATTCGGTC GCTTATACAT 60
TCGCTTCGCG ATACGTTTCG GAGGCTCTTC CCCGGTTCAG GATACCGGAG CAGTCGATCC 120
CCAAGGATGC GGCGTACCAG ATCATCAACG ACGAGCTGAT GCTCGACGGG AACCCGCGGT 180
TGAATCTGGC GTCGTTCTGT ACGACGTGGA TGGAGCCGGA GTGCGATCGC CTCATCATGG 240
CGGCCGTCAA CAAGAACTAC GTCGACATGG ACGAGTACCC CGTCACCACC GAGCTCCAGA 300
ATCGCTGCGT AAATATGATA GCCCACCTTT TCAATGCCCC AATTGGGGAA NACGAAACGG 360
CTGTTGGAGT TGGAACTGTG GGTTCCTCCA GAAGCAATCA TGCTTGACAG ACTTGCAATC 420

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AAGAGGAAAT GGCAGAACAA AAGAAAGGCA GAGGANAAGC CTTACGACAA ACCCAACNTT 480
GTTACCGGTG CAAATGTTCA GGTTCGCTGG GANAAATTTG CAAGGTATTT TGAAGTTTGA 540
ACTGAAAGAA ATTGAAGTTG AAAGAAGGAT ATTATGTTAA TGGATCCTGC CAAGGCAGTA 600
NAAATGGTTG ATGAAAAATA CATATGTTTT TGCTGCCATC TTTGGGTTCA ACTCTCCCTG 660
GGAAATTTG AANATGTTAA CCTTCTAAAT GATCTCCTGA CNGAAAAAAA CCCAGAAACT 720
GGGTTGGACC CCCNTACTT GT 742

(2) INFORMATION FOR SEQ ID NO: 21:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 807 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: cDNA

(vii) IMMEDIATE SOURCE:
(B) CLONE: U-U92

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:

GGCACGAGCT CTAGCCGATG ACTCTCTCGG CGGTAGCATC TGATGCCGAT GATTCGGTCG 60
CTTATACATT CGCTTCGCGA TACGTTTCGG AGGCTCTTCC CCGGTTTCAGG ATACCGGAGC 120
AGTCGATCCC CAAGGATGCG GCGTACCANA TCATCAACGA CGAGCTGATG CTCGACGGGA 180
ACCCGCGGTT GAATCTGGCG TCGTTCGTGA CGACGTGGAT GGAGCCGGAG TGCGATCGCC 240
TCATCATGGC GGCCGTCAAC AAGAACTACG TCGACATGGA CGAGTACCCC GTCACCACCG 300
AGCTCCAGAA TCGCTGCGTA AATATGATAG CCCACCTTTT CAATGCCCCG ATTGGGGAAN 360
ACNAAACGGC TGTTGGAGTT GGAAGTGTGG GGTCTCAAA AGCAATCATG CTTGCAGGGC 420
TTGCATTCAA GAGGAAATGG CANAACAAAA GAAAGGCAGA GGANAAGCCT TACGACAAAC 480
CCAACATTGT TACCGGTGCA AATGTTTCNGG TTTTCTGGG AANAAATTTG CAAGGTATTT 540
TGAAATTTGA ACTGANAGAA NTGAANTTGA AAGAAGGATA TTATGTTTAT GGATCCCNGC 600
CCAAGGCAGT ANAAATGGTT GATGAAAATA CCAATTTNTG TTGCTTGCCC ATCTTTGGGT 660
TCCACTCTCN CTGGGANAAT TTTGAAAAT GTTNAGCTTC TAAATGATCT CCNGGACCNA 720
AAAAANNCCC NNAANCTNGG TTGGGACCCC CCCNTACCTT TTCNATNCCT GCCANTTNGG 780
GGATTCNNTA NCGCCTTTCC TNCTATC 807

(2) INFORMATION FOR SEQ ID NO: 22:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 770 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: cDNA

(vii) IMMEDIATE SOURCE:

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(B) CLONE: U-U91

5 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:

GGCACGAGAG AAAAAATTGT AAAGTTTGAC TTTCATGGAC AGCCTGCGGA GCTCAAGCAT 60
GGTAGCCTTG TCATAGCAGC AATTACAAGC TGCACAAACA CATCAAATCC CAATGTTATG 120
10 CTTGGTGCTG GTCTTGTTGC AAAGAAGGCC TGTGAATTAG GTCTACAGGT TAAGCCTTGG 180
ATCAAAACCA GCCTTGCTCC AGGTTCTGGA GTTGTACCA AGTATTTGCT TAAGAGTGGC 240
15 CTACAAGAAT ATTTGAATCA GCAAGGATTT AATATTGTTG GGTATGGCTG CACAACATGT 300
ATCGGAAACT CTGGGGATCT TGATGAGTCT GTGGCTGCTG CAATTTCCGA TAATGATATA 360
GTTGCTGCTG CTGTTCTATC TGGAATAGG AATTTTGAGG GACGTGTGCA TCCATTGACA 420
20 CGAGCTAACT ATCTTGCTTC ACCTCCGCTT GTTGTAGCTT ATGCGCTTGC TGGAACAGTT 480
GACATTGATT TTGAAAAAGA ACCCAATTGG AACAGGGGAA GGATGGGAAA AAACATATAC 540
25 TTCCAGGATA TATGGCCGTC CACTGAANAA ATTGCACAGG TTGTGCAATC CANTGTTTTT 600
GCCTGAAATG TTCAAGAATA CCTATGAAGC AATCACCAAA GCACCCTATG TTGGAACCAA 660
CTGACTGTTC CCNGCCACAC TCTTTATTCA TGGGACCCAA TCCNCNTACA TCTTAACCAC 720
30 CNTATTTTAA GGANATGACC ATGGCCCNCC TGTCNCATG GGGTGAAAAA 770

(2) INFORMATION FOR SEQ ID NO: 23:

35 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 810 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: unknown

40 (ii) MOLECULE TYPE: cDNA

(vii) IMMEDIATE SOURCE:
45 (B) CLONE: U-U96

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 23:

50 GGCACGAGAG GGCCGTTCCCT TTTTGTGCTC GCTTTGCTGC CTCCTCGTTC GTCTTTTCCG 60
CGAATTTTAC CGGCCATGAA CAGCCTTCGG AGCCTTCCGA CATCCTCCGC TCCGCCCTCG 120
55 CCGGTCCCGA GAGGACGTTT GAGTAGGCCA CCGACCTTGA ATCTGGGGGT GATACGACCA 180
CATCATCTTC GTGTAAATGT CGCCAGGAGT GCATGTTCCA AGTCTTCTGC AAGTCCTGAG 240
AAGACTGGTG CTGAAGTGCA AGATCAGAAG TCTGAGATAT ATAGCAGTGA TATGACAAAA 300
60 GCAATGGGTG CAGTGCTGAC ATATAGGCAT GAGCTTGGAA TGAATTATAA TTTCATCTAC 360
CCAGGATTGA TTGTTGGTTC TTGTCTACAG ACCCATCAG ATGTTGATAA GCTTCCNAAA 420
65 GATTGGGGTT GAAGACCATC TTTTGTCTGC AGAAGGACTC GGATCTTGA ATATTTTGGG 480
GTTGAAATTG GTGCAATTCC NTGAATATGC CATGCAATGT GGTGACATTG AACATCTTCN 540
TGCTGAAATC AGGGATTTTG ATGCATTGA TTTGAAGATG ANACTTCCTG CNGTANTTAC 600
70 NAATTATACA AGGCTAATTA ATCCGAATGG TGAATGACT TATTTTCNCT GTACANCCNG 660